Docket No.: 15776-1

COMPLETE SET OF PENDING CLAIMS

(Currently Amended) A navigation device comprising:

 an electronic compass to detect an orientation and provide a corresponding heading

one or more motion sensing devices to detect motion along different axis and provide corresponding motion signals; and

a processing unit communicatively coupled to the electronic compass and <u>the</u> one or more motion sensing devices to <u>received receive</u> the heading signal and <u>the</u> one or more motion signals, determine a position and orientation, and automatically provide different navigation information depending on the orientation of the navigation device.

- 2. (Original) The navigation device of claim 1 wherein the processing unit is further configured to provide different navigation information depending on whether the navigation device is affixed to a user or not.
- (Currently Amended) The navigation device of claim 2 further comprising:
 a visible indicator to provide navigation information to a user; and
 a holster to affix the navigation device to a user.
- 4. (Currently Amended) The navigation device of claim 1 wherein the navigation device automatically switches between different modes of operation depending on the orientation of the navigation device,

and provide provides either heading or position information, depending on the mode of operation.

5. (Original) The navigation device of claim 1 wherein if the navigation device is affixed to a user and the device is in a primary orientation, navigation calculations are made according to bipedal ambulation to provide a position,

if the navigation device is affixed to a user and the device is in a secondary orientation, then navigation calculations are made according to crawling ambulation to provide a position, and

if the navigation device is hand-held, only azimuth data is provided to the user.

- 6. (Original) The navigation device of claim 1 further comprising: a communication port to transmit navigation information.
- 7. (Original) A method of navigation comprising: determining whether a navigation device is affixed to a user; obtaining an azimuth heading; calculating a dead reckoning position if the navigation device is affixed to the user; providing azimuth heading and dead reckoning position if the navigation device is affixed to the user; and

providing azimuth heading otherwise.

8. (Original) The method of claim 7 further comprising:

determining an orientation of the navigation device relative to a horizontal plane;

calculating the dead reckoning position according to bipedal ambulation when the

navigation device is affixed to the user and is in a first orientation; and

calculation the dead reckoning position according to crawling ambulation when the

navigation device is affixed to the user and is in a second orientation.

9. (Original) A method comprising:

determining the orientation of a navigation device;

automatically selecting a first motion measurement algorithm if the navigation device is in a first orientation;

automatically selecting a second motion measurement algorithm if the navigation device is in a second orientation; and

providing a position according to the pedometry algorithm selected.

Docket No.: 15776-1

10. (Original) The method of claim 9 wherein the orientation of the navigation device is determined relative to a horizontal plane.

11. (Original) The method of claim 9 further comprising:

determining if the navigation device is affixed to a user;

automatically selecting the first motion measurement algorithm if the navigation device is in the first orientation and affixed to the user;

automatically selecting the second motion measurement algorithm if the navigation device is in the second orientation and affixed to the user; and

suspending all motion measurement calculations if the navigation device is not affixed to the user.

12. (Original) A machine-readable medium having one or more instructions for dead reckoning navigation, which when executed by a processor, causes the processor to perform operations comprising

determining whether a navigation device is affixed to a user;

obtaining an azimuth heading;

calculating a dead reckoning position if the navigation device is affixed to the user; outputting the azimuth heading and dead reckoning position if the navigation device is affixed to the user; and

outputting the azimuth heading otherwise.

13. (Currently Amended) The machine-readable medium of claim 12 to further comprising: determining an orientation of the navigation device relative to a horizontal plane, calculating the dead reckoning position according to bipedal ambulation when the navigation device is affixed to the user and is in a first orientation, and

calculation the dead reckoning position according to crawling ambulation when the navigation device is affixed to the user and is in a second orientation.

14. (New) The method of claim 9 further comprising: detecting if a step has been taken.

Docket No.: 15776-1

15. (New) The method of claim 9 further comprising: providing heading information.

- 16. (New) The navigation device of claim 1 wherein determining the orientation includes determining the orientation of a gravity vector.
- 17 (New) The navigation device of claim 1 further comprising:
 a detector to detect when the navigation device is inserted in a holster.